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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/931,257	08/17/2001	Naoki Tsukiji	210424US8	2728

22850 7590 03/31/2003

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1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER

ZAHN, JEFFREY N

ART UNIT	PAPER NUMBER
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2828

DATE MAILED: 03/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Applicati n N .

09/931,257

Applicant(s)

TSUKIJI ET AL.

Examin r

Jeffrey N Zahn

Art Unit

2828

-- The MAILING DATE f this c mmunicati n appears n th cover sheet with the correspondence address --  
Period f r Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.



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**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5. 6) ☐ Other:

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**Claims 1-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

Regarding Claims 1-36, the following claim language is unclear/vague: 1) what structural element the "temperature element" is configured to measure? 2) what comprises the claimed "temperature measuring element",? 3) how is the said temperature measuring element configured to measure temperature? and 4) how is the control unit physically connected to the other claimed elements to control the temperature. This list is not exhaustive. The claims contain mostly functional language without any specific structural elements and cooperative relationships between the elements to support the claimed functions. Accordingly, without structure to support the functional language, the functional language does not further limit the claim.

Regarding Claims 13-14 and 17-25, it is unclear/vague what the Applicant regards as "a means for detecting a driving current" and "a means for controlling said temperature regulating unit."

Regarding Claim 19, it is unclear/vague what the Applicant regards as "a means for storing said control function."

Regarding Claim 20, it is unclear/vague what the Applicant regards as "a means for setting a desired wavelength and a means for storing plural control functions."

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

**Claims 1-36 are rejected under 35 U.S.C. 102(e) as being anticipated by Sato (US 6393041).**

Sato discloses a semiconductor laser device comprising:  
a semiconductor laser element (1);  
a temperature measuring element (6) configured to measure a temperature;  
a temperature regulating (5) unit having said semiconductor laser element and said temperature measuring element thermally connected thereto;

a current detecting unit (10) configured to detect a driving current applied to said semiconductor laser element; and

a control unit configured to control said temperature regulating unit using a control function to achieve a substantially constant wavelength output (abstract) from said semiconductor laser element, said control function defining a relationship between a predetermined driving current and a predetermined temperature, said control unit being configured to control said temperature regulating unit such that the temperature detected by said temperature measuring element substantially equals the predetermined temperature corresponding to the detected driving current as defined by said control function. (col. 14, line 9- col. 7, line 11)

In addition, Sato discloses a heat extractor (3), an active layer (1), a storage unit (5) for setting desired wavelengths (col. 5, line 55- col. 6, line 65) and a thermistor (12).

Regarding Claims 26-36, these method claims are inherent of the structure disclosed and discussed above in regards to Sato.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hori et al. (US5042042), Eda et al. (US5438579), Bohler (US 5602475), Burbidge et al. (US 6101200), Komatsu (US 6192170) and Baba et al. (US 6229832).

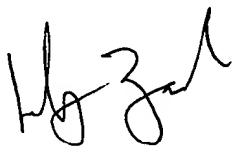
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey N Zahn whose telephone number is 703-305-3443. The examiner can normally be reached on M-F: 8:30-5:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Ip can be reached on 703-308-3098. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-

0956.



Jeffrey Zahn  
March 21, 2003



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